

## Observations of Uranus at Windsor, New South Wales. By John Tebbutt.

As the planet *Uranus* during July and August last passed very close to the well-determined star No. 4648 of the Radcliffe Catalogue for 1890, the opportunity was taken for comparing the two objects by means of the filar micrometer of the 8-inch equatorial. The accompanying table gives the results of the measures. The planet was at no time sufficiently well defined to admit of the limbs being observed, so that the centre of the disc was chosen as the point for observation. The resulting corrections to the Mean Noon Ephemeris of the *Nautical Almanac* have been kindly supplied by Mr. Merfield, and are given in the last column of the table.

Observations of *Uranus*.

1904.	Windsor Mean Time,	Planet—Star.	No. of Comps.	Reductions to App. Place.		Parallax Corrections.	Concluded Geocentric Apparent Places of Planet.			Obs.—Cal.
				$\Delta a.$	$\Delta \delta.$		$h$	$m$	$s$	
July 18	8 14 18	m 8 + 0 26 12	+ 1 51 1	10	+ 3.19	+ 8.4	- 0.01	- 0.1	17 46 17.08	- 23 37 39
„ 19	7 37 28	+ 0 17 49	+ 1 55 1	12	+ 3.19	+ 8.4	- 0.02	- 0.1	17 46 8.44	- 23 36 59.9
„ 26	7 0 22	- 0 40.67	+ 2 13.0	12	+ 3.16	+ 8.3	- 0.02	- 0.1	17 45 10.25	- 23 36 42.1
„ 29	6 35 41	- 1 3.47	+ 2 20.4	15	+ 3.15	+ 8.2	- 0.02	- 0.1	17 44 47.44	- 23 36 34.8
Aug. 1	6 46 2	- 1 25.00	+ 2 27.8	15	+ 3.13	+ 8.2	- 0.02	- 0.1	17 44 25.89	- 23 36 27.4
„ 2	6 34 36	- 1 31.84	+ 2 29.6	12	+ 3.12	+ 8.2	- 0.02	- 0.1	17 44 19.04	- 23 36 25.6
„ 3	6 30 45	- 1 38.47	+ 2 32.8	11	+ 3.11	+ 8.2	- 0.02	- 0.1	17 44 12.40	- 23 36 22.4
„ 5	6 37 18	- 1 51.47	+ 2 37.0	8	+ 3.10	+ 8.1	- 0.02	- 0.1	17 43 59.39	- 23 36 18.3

## Mean Place of Comparison Star for 1904.0.

$a.$   $\delta.$  Authorities.  
17<sup>h</sup> 45<sup>m</sup> 47<sup>s</sup> 78  $-23^{\circ} 39' 3''$  Argent. Gen. Cat. 1875. No. 24243.  
(Radcliffe Cat. 1890. No. 4648.

Observatory, Peninsula, Windsor, N.S. Wales:  
1905 January 23.

*Observations of Uranus and Saturn taken with the 6-inch Telescope of the Transit Circle of the Sydney Observatory.*  
By C. J. Merfield.

The accompanying observations of *Uranus* and *Saturn* were obtained with the telescope attached to the circles of the meridian instrument of the Sydney Observatory.

The writer, who is at present under the direction of Mr. Lenehan, acting Government Astronomer, was able to secure these observations during the evening's work with this instrument.

The equatorial instrument of this observatory requires a thorough overhauling, which will be undertaken at an early date; when completed it is the intention to secure observations of minor planets, comets, and southern double stars. The present writer anticipates being able to undertake this work.

URANUS.											Star.
1904.	M.T. Sydney.	$\Delta\alpha.$	$\Delta\delta.$	Op.	$\alpha$ app.	$\delta$ app.	Log $p\Delta\alpha.$	Star reductions to apparent.			
	h m s	m	s		h m s	h m s					
July 16	10 7 41	+8	4.99	+0 48.7	7 1	17 46 34.53	-23 37 9.8	0.1863 <sub>n</sub>	+3.18 +7.9		1
16	10 7 41	+0 43.56	...	7	17 46 34.56	...	...	...	3.19	...	4
18	9 59 31	+0 25.51	+1 50.7	7 1	17 46 16.51	-23 37 4.3	0.1864 <sub>n</sub>	3.19 8.4		4	
26	9 26 57	+6 39.78	+1 16.7	7 1	17 45 9.28	-23 36 42.0	0.1867 <sub>n</sub>	3.14 7.7		1	
26	9 26 57	+4 15.88	...	7	17 45 9.32	...	...	3.15	...	3	
27	9 22 53	+6 32.20	...	7	17 45 1.70	...	...	3.14	...	1	
27	9 22 53	+4 8.32	...	7	17 45 1.76	...	...	3.15	...	3	
29	9 14 46	+6 17.40	+1 24.5	7 1	17 44 46.89	-23 36 34.3	0.1868 <sub>n</sub>	3.13 7.6		1	
29	9 14 46	-1 4.13	...	7	17 44 46.83	...	...	3.15	...	4	
Aug. 2	8 58 34	+5 48.90	+1 33.7	7 1	17 44 18.36	-23 36 25.1	0.1869 <sub>n</sub>	3.10 +7.6		1	
2	8 58 34	+3 24.86	...	7	17 44 18.26	...	...	+3.11	...	3	